

CLAIMS

1. A method of drying of books and similar paper-based materials in which the material dried is exposed to microwave irradiation with a frequency ranging from 500 MHz through 10 GHz comprising the steps of:
lining the material with ceramic slabs,
exposing the lined material to microwave irradiation under the atmospheric or a reduced atmospheric pressure and controlling the power supply to keep the temperature of the material in a range of 30-70 °C.
2. A method of claim 1 wherein the microwave irradiation is carried out at a frequency of 2450 MHz or 915 MHz.
3. A method of claim 1 wherein the drying is carried out under a pressure ranging from 1 kPa to the atmospheric pressure.
4. A method of claim 3 wherein the drying is carried out at a temperature from 30 to 70°C.
5. An apparatus for performing the method according to claim 1 comprising
a microwave drying oven adapted for batch and/or continuous processing of a material to be dried;
ceramic slabs capable of moisture absorption for contacting the material during the drying process.

6. The apparatus according to claim 5 wherein the ceramic slabs are shaped by horizontal grooves and/or vertical holes.